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## **The Pennant-winged Nightjar *Macrodipteryx vexillarius* (Caprimulgidae), its generic status, synonyms and types**

by *Nigel Cleere*

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The Pennant-winged Nightjar *Macrodipteryx vexillarius* is a distinctive, Afrotropical caprimulgid, which is currently treated as congeneric with another Afrotropical species, the Standard-winged Nightjar *Macrodipteryx longipennis* (Fry *et al.* 1988, Cleere 1998, 1999, Holyoak 2001). It is a monotypic species, despite having a breeding range covering much of southern Africa, and its taxonomy contains four synonyms, all of which are over 100 years old. As a result of literature and museum studies, the systematics and taxonomy of the Pennant-winged Nightjar are now reviewed, errors in the nomenclature are corrected and the type material identified and documented.

### **Generic status**

Originally named *Semeiophorus* (*Macrodipteryx*?) *vexillarius*, the species was described with a general structure precisely the same as *Macrodipteryx africanus* Swainson (now = *M. longipennis*), but with the form of the wing very different (Gould 1838). *Cosmetornis* was published as a *nomen novum* by Gray (1840), who considered *Semeiophorus* to have been previously used in herpetology and entomology. The Pennant-winged Nightjar was first considered congeneric with *M. longipennis* by Gray (1846), and then continued by Gray (1848), even though no specimens of it were held in the collections of the British Museum (Natural History) (BMNH, now the Natural History Museum) during that period. Recognition of the genus *Cosmetornis* by subsequent authors then varied, but Hartert (1892) listed the structural differences of the wings of *Macrodipteryx* and *Cosmetornis* in a key and recognised *Cosmetornis* on the basis that the differences between the two genera were so important that they could not be united into one. Four years later, the same

author stated that the two genera should again be united, as females of both *M. longipennis* and *C. vexillarius* could not be separated generically (Hartert 1896). *Cosmetornis* was again recognised by Sclater (1924), but Chapin (1939) noted that the generic distinction of *Cosmetornis* from *Macrodipteryx* was based almost entirely on the form of the wing and ornamental quills of the adult males, and that it would be almost as well to unite the two. Separate genera were recognised by Peters (1940), who also showed that the original generic name *Semeiophorus* had not been used before and was therefore an available name ahead of *Cosmetornis*, which was then recognised by Wolters (1976). *M. longipennis* and *M. vexillarius* were considered to be each other's closest relatives by Colston (in Snow 1978), because of their allopatric breeding ranges and similarities in structure and behaviour, but it was also noted that they were too different from each other to be regarded as allospecies, even though they might form a species group. Differences between *longipennis* and *vexillarius* in orbit size, cranial profile and jugal bar flexure of the skull suggested important but unstudied biological differences, which when known, might be grounds for recognising two monotypic genera (Fry 1988). Significant differences between the two were also noted in their body masses, form of 2<sup>nd</sup> primary, lengths of 3<sup>rd</sup> to 7<sup>th</sup> primaries and plumage pattern, but were still treated as congeneric because their differences did not exceed those within the genus *Caprimulgus* (Fry *et al.* 1988). Only *Macrodipteryx* was recognised by Sibley & Monroe (1990). In a more recent study, *M. vexillarius* was found to have a P9 emargination mean of 24.4%, compared to 29.9% in *M. longipennis*, which suggested further support of its recognition in the genus *Semeiophorus* (Jackson 2002).

## Nomenclature and type material

Originally given the specific name *vexillarius* (Gould 1838), *vexillaria* was introduced alongside the new generic name *Cosmetornis* by Gray (1840). However, the correct spelling of the specific name was determined to be *vexillarius* (Dowsett & Dowsett-Lemaire 1993), yet even so, some modern authors have continued to name it *vexillaria* (e.g. Fry *et al.* 1988, Elgood *et al.* 1994, Maclean & Whittington 1997, Dean 2000). It has also been proposed that the English name be altered to Pennantwinged Nightjar (Jackson 1993).

Although illustrated and described by Gould (1838), no type was nominated, or subsequently listed by Hartert (1892). A type was later identified by Sclater & Mackworth-Præd (1919) and included by Warren (1966), although its validity has now been examined and rejected by Cleere & Walters (2002).

## Synonyms

*Cosmetornis burtoni* was described from a single specimen deposited in the British Museum (Natural History) that was collected by Captain R. Burton in Fernando Po (Gray 1862). That description was noted by P.L.Sclater (1864), but was overlooked

by Hartert (1892), who quoted Gray (1869) as the original reference. In this latter work, the name appeared as a *nomen nudem* and therefore the type status of Captain Burton's specimen was not recognised by either Hartert (1892) or Warren (1966). The specimen, BMNH 1862.11.28.1 adult male, can now be identified as the holotype of *Cosmetornis burtoni*.

*Cosmetornis spekei* was considered by early authors to have been described and illustrated by P.L.Sclater (1864). However, although a specimen collected by Captain J.H. Speke at Urondogami, north of Lake Nyanza, Uganda was discussed in that work, it was not named, and the accompanying plate by Mr Wolf, of a male Pennant-winged Nightjar, was labelled *Cosmetornis vexillarius*. The first author to publish *Cosmetornis spekei* with P.L.Sclater 1864 as the original citation appears to have been Heuglin (1869), who simply treated it as a synonym of *Macrodipteryx vexillarius*. The name is therefore unavailable under ICZN (1999) Article 11.6, and the specimen discussed by Sclater (1864) has no type status and was not listed by Hartert (1892) or included as a type by Warren (1966). The whereabouts of the specimen collected by Captain Speke is unknown.

*Macrodipteryx sperlingi* was based on a single bird taken at sea off the Bay of Malimba by Commander R. M. Sperling, and was described as much larger and differently marked on the wings and tail than *M. longipennis* (Sharpe 1873). The specimen, BMNH 1874.5.1.60 adult female, was not listed by Hartert (1892), but was recorded as the holotype by Warren (1966).

*Caprimulgus fulleborni* was described from a single bird collected by Dr F. Fülleborn in Neu Helgoland, in December 1899 (Reichenow 1900). The holotype is a juvenile and is deposited in the Museum für Naturkunde, Berlin (ZMB), where it is registered as ZMB 49.342.

## Discussion

The recognition of separate generic status for the Pennant-winged Nightjar has certainly caused problems for taxonomists and ornithologists. Arguments in favour of the monotypic genus *Semeiophorus* for the Pennant-winged Nightjar have centred mainly on the breeding male, and concern the plumage colouration and markings, the shape of the wing and form of the elongated second primary. Supporters of congeneric status with the Standard-winged Nightjar have noted that these differences are of specific not generic importance and have also put forward the similarities of their breeding biologies, vocalizations and females. In a recent study of two neotropical species considered to be congeneric, the wing shape of the male Sicklet-winged Nightjar *Eleothreptus anomalus* was found to be more extreme than that of the male White-winged Nightjar *Eleothreptus candicans*, which had far more white in its plumage (Cleere 2002).

I agree with the view that the Pennant-winged and Standard-winged Nightjars are each other's closest relatives and should be recognised as congeneric. I do not believe that the English name should be changed to Pennantwinged Nightjar.

**Synonymy of the Pennant-winged Nightjar**  
***Macrodipteryx vexillarius* (Gould 1838)**

*Semeiophorus vexillarius* Gould, J. 1838, *Icones Avium* Pt. 2, pl 13 & text.

- published as *Semeiophorus* (*Macrodipteryx*?) *vexillarius*.

Type: whereabouts unknown, type locality designated as southern Africa, see Cleere & Walters (2002).

Etymology : (L) *vexillarius*, a standard-bearer. The name refers to the elongated second primaries of the breeding males.

*Cosmetornis burtoni* Gray, G.R. 1862, *Ann Mag Nat Hist* 3 (10), p. 445.

Holotype: BMNH 1862.11.28.1 adult male collected by Captain R. Burton in Fernando Po.

Etymology : Named after Capt. R. Burton, the collector of the type specimen.

*Cosmetornis spekei* "P.L.Sclater" Heuglin, T. 1869. *Ornithologie Nordost-Afrika's*. Vol. 1, p. 135.

- published as a synonym of *Macrodipteryx vexillarius* and unavailable under ICZN (1999) Article 11.6.

Etymology: Named after J.H. Speke (1827 - 1864), British explorer.

*Macrodipteryx sperlingi* Sharpe, R.B. 1873, *Proc. Zool. Soc. Lond.* 1873, p. 626.

Holotype: BMNH 1874.5.1.60 adult female collected by R.M. Sperling at sea off the Bay of Malimba.

Etymology: Named after Commander R.M. Sperling, collector of the type specimen.

*Caprimulgus fülleborni* Reichenow, A. 1900, *Orn. Monatsb.* 8 (7), p. 98.

Holotype ZMB 49.342 juvenile collected December 1899 by Dr F. Fülleborn in Neu Helgoland (= near Pangambe, Songoea, Tanzania).

Etymology: Named after Dr F. Fülleborn (1866 - 1933), German zoologist and collector of the type specimen.

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## **A Kenya nest and behavioural notes on the Green-headed Sunbird *Cyanomitra (Nectarinia) verticalis***

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The Green-headed Sunbird *Cyanomitra (Nectarinia) verticalis* is a reasonably well known (see citations in Fry *et al.* 2000 and Cheke *et al.* 2001) sunbird of diverse elevations in its extensive Afrotropical range. Small numbers of the eastern race *viridispiciens* are resident and a pair and their young are regular attendants at 5-7 sugar-water feeders at our 8 ha property, maintained as a wildlife refuge northeast of Nanyuki at 1,950 m, Kenya (0°2'N, 37°14'E). The habitat here is mixed with upland forest adjacent to the Nanyuki River, bordered to the east by dense thickets and secondary woodland, and still further east and slightly higher, a mixture of degraded *Acacia drepanolobium* grassland and patches of degraded dry *Juniperus-Olea-Euclea* woodland and bushland. At least one pair of Green-headed Sunbirds nested in January-February 2001; recent fledglings were seen mid-July into August 2001; an adult male accompanied two recent fledglings (with gape wattles) to the feeders in mid-January 2002, and another fledgling with male and female was there October-November 2002. Rainfall, usually tri-seasonal about Nanyuki (Brown & Britton 1980), was above average for the area in both years, and exceptional in January 2001, and very heavy in October-November of 2001 and 2002; rainfall for 2001 was 987 mm at the house, while the Nanyuki yearly mean is 688 mm, and the 5 years 1997-2001 saw extremes of 398 mm in 2000 and 1,597 mm in 1997). Like most birds of this region the Green-headed Sunbird breeds during and just after the rains when insects and nectar are available.

### **Ecology and behaviour**

In our area this sunbird appears to be territorial and resident. We once observed two males near our feeders but one was chased away immediately. On their approach to the feeders they occasionally hawked insects. Sunbirds came from woods below the